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# Bontril® (phendimetrazine tartrate) Capsule SR 105MG USP Rx Only Clll Trademark of Valeant Pharmaceutical

#### **DESCRIPTION**

Phendimetrazine tartrate, as the dextro isomer, has the chemical name of (+)-3,4-Dimethyl-2-phenylmorpholine Tartrate.

The structural formula is as follows:

$$C_{12}H_{17}NO\bullet C_4H_6O_6$$
 СООН  $C_{12}H_{17}NO\bullet C_4H_6O_6$  М.W. 341.36

Phendimetrazine tartrate is a white, odorless powder with a bitter taste. It is soluble in water, methanol and ethanol.

Bontril<sup>®</sup> Slow-Release capsules contain FD and C Yellow No. 6 as a color additive.

#### CLINICAL PHARMACOLOGY

Phendimetrazine tartrate is a sympathomimetic amine with pharmacological activity similar to the prototype drugs of this class used in obesity, the amphetamines. Actions include central nervous system stimulation and elevation of blood pressure. Tachyphylaxis and tolerance have been demonstrated with all drugs of this class in which these phenomena have been looked for.

Drugs of this class used in obesity are commonly known as "anorectics" or "anorexigenics". It has not been established, however, that the action of such drugs in treating obesity is primarily one of appetite suppression. Other central nervous system actions or metabolic effects may be involved.

Adult obese subjects instructed in dietary management and treated with anorectic drugs lose more weight on the average than those treated with placebo and diet, as determined in relatively short term clinical trials.

The magnitude of increased weight loss of drug-treated patients over placebo-treated patients is only a fraction of a pound a week. The rate of weight loss is greatest in the first weeks of therapy for both

drug and placebo subjects and tends to decrease in succeeding weeks. The possible origin of the increased weight loss due to the various drug effects is not established. The amount of weight loss associated with the use of an anorectic drug varies from trial to trial, and the increased weight loss appears to be related in part to variables other than the drug prescribed, such as the physician investigator, the population treated, and the diet prescribed. Studies do not permit conclusions as to the relative importance of the drug and non-drug factors on weight loss.

The natural history of obesity is measured in years, whereas the studies cited are restricted to a few weeks duration; thus, the total impact of drug-induced weight loss over that of diet alone must be considered clinically limited.

The active drug 105 mg of phendimetrazine tartrate in each capsule of this special slow-release dosage form approximates the action of three 35 mg non-time release doses taken at 4 hour intervals.

The major route of elimination is via the kidneys where most of the drug and metabolites are excreted. Some of the drug is metabolized to phenmetrazine and also phendimetrazine-N-oxide.

The average half-life of elimination when studied under controlled conditions is about 1.9 hours for the non-time and 9.8 hours for the slow-release dosage form. The absorption half-life of the drug from conventional non-time 35 mg phendimetrazine tablets is approximately the same. These data indicate that the slow-release product has a similar onset of action to the conventional non-time-release product and, in addition, has a prolonged therapeutic effect.

#### INDICATIONS AND USAGE

Phendimetrazine tartrate extended-release capsules are indicated in the management of exogenous obesity as a short term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction in patients with an initial body mass index (BMI) of 30 kg/m<sup>2</sup> or higher who have not responded to appropriate weight reducing regimen (diet and/or exercise) alone.

Below is a chart of Body Mass Index (BMI) based on various heights and weights.

BMI is calculated by taking the patient's weight, in kilograms (kg), divided by the patient's height, in meters (m), squared. Metric conversions are as follows: pounds  $\div 2.2 = \text{kg}$ ; inches  $\times 0.0254 = \text{meters}$ 

BODY MASS INDEX (BMI), kg/m<sup>2</sup> Height (feet, inches)

5′0″	5′3″	5′6″	5′9″	6'0"	6'3"
27	25	23	21	19	18
29	27	24	22	20	19
31	28	26	24	22	20
33	30	28	25	23	21
35	32	29	27	25	23
37	34	31	28	26	24
39	36	32	30	27	25
41	37	34	31	29	26
43	39	36	33	30	28
45	41	37	34	31	29
47	43	39	36	33	30
49	44	40	37	34	31
	27 29 31 33 35 37 39 41 43 45 47	27 25 29 27 31 28 33 30 35 32 37 34 39 36 41 37 43 39 45 41 47 43	27     25     23       29     27     24       31     28     26       33     30     28       35     32     29       37     34     31       39     36     32       41     37     34       43     39     36       45     41     37       47     43     39	27     25     23     21       29     27     24     22       31     28     26     24       33     30     28     25       35     32     29     27       37     34     31     28       39     36     32     30       41     37     34     31       43     39     36     33       45     41     37     34       47     43     39     36	27       25       23       21       19         29       27       24       22       20         31       28       26       24       22         33       30       28       25       23         35       32       29       27       25         37       34       31       28       26         39       36       32       30       27         41       37       34       31       29         43       39       36       33       30         45       41       37       34       31         47       43       39       36       33

Phendimetrazine tartrate is indicated for use as monotherapy only.

#### CONTRAINDICATIONS

Known hypersensitivity or idiosyncratic reactions to sympathomimetics.

Advanced arteriosclerosis, symptomatic cardiovascular disease, moderate and severe hypertension, pulmonary hypertension, hyperthyroidism and glaucoma. Highly nervous or agitated patients. Patients with a history of drug abuse. Patients taking other CNS stimulants, including monoamine oxidase inhibitors. Use in combination with other anorectic agents is contraindicated.

#### **WARNINGS**

Phendimetrazine tartrate should not be used in combination with other anorectic agents, including prescribed drugs, over-the-counter preparations and herbal products.

In a case-control epidemiological study, the use of anorectic agents, including phendimetrazine tartrate, was associated with an increased risk of developing pulmonary hypertension, a rare, but often fatal disorder. The use of anorectic agents for longer than three months was associated with a 23-fold increase in the risk of developing pulmonary hypertension. Increased risk of pulmonary hypertension with repeated courses of therapy cannot be excluded.

The onset or aggravation of exertional dyspnea, or unexplained symptoms of angina pectoris, syncope, or lower extremity edema suggest the possibility of occurrence of pulmonary hypertension. Under these circumstances, phendimetrazine tartrate should be immediately discontinued, and the patient should be evaluated for the possible presence of pulmonary hypertension.

Valvular heart disease associated with the use of some anorectic agents such as fenfluramine and dexfenfluramine has been reported. Possible contributing factors include use for extended periods of time, higher than recommended dose, and/or use in combination with other anorectic drugs. However, no cases of this valvulopathy have been reported when phendimetrazine tartrate has been used alone.

The potential risk of possible serious adverse effects such as valvular heart disease and pulmonary hypertension should be assessed carefully against the potential benefit of weight loss. Baseline cardiac evaluation should be considered to detect preexisting valvular heart diseases or pulmonary hypertension prior to initiation of phendimetrazine treatment. Phendimetrazine tartrate is not recommended in patients with known heart murmur or valvular heart disease. Echocardiogram during and after treatment could be useful for detecting any valvular disorders which may occur. To limit unwarranted exposure and risks, treatment with phendimetrazine tartrate should be continued only if the patient has satisfactory weight loss within the first 4 weeks of treatment (i.e., weight loss of at least 4 pounds, or as determined by the physician and patient).

Tolerance to the anorectic effect of phendimetrazine develops within a few weeks. When this occurs, its use should be discontinued; the maximum recommended dose should not be exceeded. Use of phendimetrazine tartrate within 14 days following the administration of monoamine oxidase inhibitors may result in a hypertensive crisis. Abrupt cessation of administration following prolonged high dosage results in extreme fatigue and depression. Because of the effect on the central nervous system, phendimetrazine may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly.

Phendimetrazine tartrate is not recommended for patients who used any anorectic agents within the prior year.

#### **PRECAUTIONS**

Caution is to be exercised in prescribing phendimetrazine tartrate for patients with even mild hypertension.

Insulin requirements in diabetes mellitus may be altered in association with the use of phendimetrazine and the concomitant dietary regimen.

Phendimetrazine may decrease the hypotensive effect of guanethidine.

The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage

## Carcinogenesis, Mutagenesis, Impairment of Fertility

Studies with Phendimetrazine Tartrate sustained release have not been performed to evaluate carcinogenic potential, mutagenic potential or effects on fertility.

## **Pregnancy**

## **Pregnancy Category C**

Animal reproduction studies have not been conducted with Phendimetrazine Tartrate sustained release. It is also not known whether Phendimetrazine Tartrate sustained release can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Phendimetrazine Tartrate sustained release should be given to a pregnant woman only if clearly needed.

## **Usage in Pregnancy**

Safe use in pregnancy has not been established. Until more information is available, phendimetrazine tartrate should not be taken by women who are or may become pregnant unless, in the opinion of the physician, the potential benefits outweigh the possible hazards.

#### **Nursing Mothers**

It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Phendimetrazine Tartrate sustained release capsules are administered to a nursing mother.

## **Drug Interactions**

Safe use in pregnancy has not been established. Until more information is available, phendimetrazine tartrate should not be taken by women who are or may become pregnant unless, in the opinion of the physician, the potential benefits outweigh the possible hazards

#### **Pediatric Use**

Safety and effectiveness in pediatric patients have not been established.

#### ADVERSE REACTIONS

#### Cardiovas cular

Palpitation, tachycardia, elevated blood pressure.

Valvular heart disease associated with the use of some anorectic agents such as fenfluramine and dexfenfluramine, both independently and especially when used in combination with other anorectic drugs, have been reported. However, no case of this valvulopathy has been reported when phendimetrazine tartrate has been used alone.

## **Central Nervous System**

Overstimulation, restlessness, insomnia, agitation, flushing, tremor, sweating, dizziness, headache, psychotic state, blurring of vision.

## Gas trointes tinal

Dryness of the mouth, nausea, diarrhea, constipation, stomach pain.

## Genitourinary

Urinary frequency, dysuria, changes in libido.

#### **DRUG ABUSE AND DEPENDENCE**

#### **Controlled Substance**

Phendimetrazine tartrate extended-release capsules are defined by the Drug Enforcement Administration as a Schedule III controlled substance.

## **Dependence**

Phendimetrazine tartrate is related chemically and pharmacologically to the amphetamines. Amphetamines and related stimulant drugs have been extensively abused, and the possibility of abuse of phendimetrazine should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with intense psychological dependence and severe social dysfunction. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia.

#### **OVERDOSAGE**

Acute overdosage with phendimetrazine tartrate may manifest itself by the following signs and symptoms: unusual restlessness, confusion, belligerence, hallucinations, and panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Poisoning may result in convulsions, coma, and death.

The management of overdosage is largely symptomatic. It includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapid-acting alpha receptor-blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations for its use.

#### DOSAGE AND ADMINISTRATION

Extended-release capsule

Since the product is an extended-release dosage form, limit to one extended-release capsule (105 mg Phendimetrazine Tartrate) in the morning (30-60 minutes before morning meal). Phendimetrazine Tartrate is not recommended for use in children under twelve years of age.

#### storage and dispensing

Store at 20°-25°C (68°-77°F) [see USP Controlled Room Temperature]. Protect from moisture. DISPENSE IN A TIGHT CHILD-RESISTANT CONTAINER AS DEFINED IN THE USP.

#### **HOW SUPPLIED**

Bontril Slow Release Capsules (phendimetrazine tartrate 105 mg) is available as opaque green and clear yellow capsules, imprinted with "VALEANT" and "BONTRIL 105".

Bontril® is a trademark name of Valeant Pharmaceuticals

Apotheca, Inc. repackages and distributes for private label only.

Bontril Slow Release Capsules (phendimetrazine tartrate 105 mg) is available as follows:

- NDC 12634-782-91 Blister Pack UD
- NDC 12634-782-97 Bottle of 7
- NDC 12634-782-84 Bottle of 14
- NDC 12634-782-78 Bottle of 28
- NDC 12634-782-71 Bottle of 30
- NDC 12634-782-60 Bottle of 60

Manufactured for Valeant Pharmaceuticals International 3300 Hyland Ave. Costa Mesa, CA 92626 U.S.A.

Manufactured by Mallinckrodt Inc. Hobart, NY 13788

PACKAGE LABEL AND PRINCIPAL DISPLAY PANEL 28 Capsules NDC 12634-782-78
Bontril®
phendimetrazine tartrate
Slow-Release Capsules
Green/Yellow Clll
Rx Only 105MG



## **BONTRIL**

phendimetrazine tartrate capsule

Product Information			
Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:12634- 782(NDC:0187-0498)
Route of Administration	ORAL	DEA Schedule	CIII

Active Ingredient/Active Moiety				
Ingredient Name	Basis of Strength	Strength		
<b>PHENDIMETRAZINE TARTRATE</b> (UNII: 6985IP0T80) (PHENDIMETRAZINE - UNII:AB2794W8KV)	PHENDIMETRAZINE TARTRATE	105 mg		

Inactive Ingredients			
Ingredient Name	Strength		
FD&C YELLOW NO. 6 (UNII: H77VEI93A8)			

Product Characteristics				
Color	green (green), yellow (yellow)	Score	no score	
Shape	CAPSULE (capsule)	Size	20 mm	
Flavor		Imprint Code	Valeant;Bontril;105	
Contains				

P	Packaging				
#	Item Code	Package Description	<b>Marketing Start Date</b>	Marketing End Date	
1	NDC:12634-782-91	1 in 1 BLISTER PACK			
2	NDC:12634-782-97	7 in 1 BOTTLE			
3	NDC:12634-782-84	14 in 1 BOTTLE			
4	NDC:12634-782-78	28 in 1 BOTTLE			
5	NDC:12634-782-71	30 in 1 BOTTLE			
6	NDC:12634-782-60	60 in 1 BOTTLE			

Marketing Information				
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date	
ANDA	ANDA088021	04/08/2010		

## Labeler - Apotheca, Inc. (051457844)

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